



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,988	08/23/2001	Hermann Sicius	Mo-6569/LeA 34,822	1541

34947 7590 06/29/2004

BAYER CHEMICALS CORPORATION
PATENT DEPARTMENT
100 BAYER ROAD
PITTSBURGH, PA 15205-9741

EXAMINER

METZMAIER, DANIEL S

ART UNIT PAPER NUMBER

1712

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,988

Applicant(s)

SICIUS ET AL.

Examiner

Daniel S. Metzmaier

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 9-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-26 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 14, 2004 has been entered.

Election/Restrictions

2. Newly submitted claim 25 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 25 has been amended to read on a water system rather than the a conditioning agent, which was elected without traverse.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 9-25 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. There being no allowable generic or linking claim. Election was made **without** traverse in Paper filed April 21, 2003.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is indefinite and fails to properly point out the invention in stating an amount of "the polysuccinimide", which is based on the method of application rather than the claimed conditioning agent. Applicants have amended claim 2 to require an excess of water. It is unclear that the "tablet" now claimed in claim 1 could possibly retain any form as a tablet in water in an amount of 0.1 g/m³. The concentration is based on the water systems being treated and would clearly be dependent on the concentration of the polysuccinimide in the in the conditioning agent and the amount of conditioning agent added to the water system. Neither the concentration of the polysuccinimide in the conditioning agent or the concentration of the conditioning agent employed in the water system is set forth and therefore it is unclear what is the amount of polysuccinimide in the conditioning agent intended.

Claim interpretation

5. Claim 1 would read more clearly with a semi-colon after "mixtures thereof" in the penultimate line. Applicants' claims the components of the conditioning agent ((a) polysuccinimide species and (b) fatty acids or their derivatives) "in combination" but does not define the term "in combination". Applicants do not define said term, said terms take the plain meaning in the art and would be open the chemically combined as well as physically combined.

The fatty acid derivatives are more specifically defined at page 12, lines 10-19, of the instant specification.

Attention is directed to page 12, line 31 wherein washing machines are specifically delineated as a water circulating system.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-3, 6 and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Freeman et al, US 5,266,237. Freeman et al (abstract, Tables IV and V) discloses detergent compositions comprising at least a polysuccinimide, zeolite A (conditioning agent) and sodium stearate a fatty acid derivative. While the examples do not explicitly disclose the detergent compositions of tables IV and V are in tablet form, Freeman et al at column 2, lines 61-63, clearly contemplate and discloses the specific form of tablets for the inventive detergents. Furthermore, since the majority of the detergent components disclosed in Tables IV and V, i.e., sodium carbonate, zeolite A, and sodium sulfate are dry (i.e., non-liquid inorganic powders) detergent components, it is reasonable to conclude the compositions are in tablet form or such is clearly contemplated by the patentees.

To the extent the reference differs in that it does not set forth the tablet form in sufficient specificity to anticipate said claimed tablet forms, it would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the tablet form as disclosed within the Freeman et al reference.

10. Claims 4-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al, US 5,266,237. Freeman et al discloses the conditioning agents as set forth in the above rejection. Said characterization of the reference is herein incorporated by reference.

Freeman et al differs from the claims 4-5 and 7 in the further addition of specific additives conventional to detergent manufacture, e.g., dispersants, complexing agents, and biocides.

Freeman et al (column 2, lines 48 et seq) discloses detergent builders including polycarboxylic acids, nitrilotriacetic acid, polymeric phosphonates. Freeman et al (column 3, lines 44-49) discloses materials functioning as biocides including and not limited to bleaching agents. Freeman et al (column 3, lines 66 et seq

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the conventional additives as taught in the Freeman et al reference for their art known functions. Furthermore, the combination of two or more additives taught for the same function in the prior logically follows. It is generally prima facie obvious to use in combination two or more ingredients that have previously been used separately for the same purpose in order to form a third composition useful for that same purpose. In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980); In re Pinten, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971); In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960). As stated in Kerkhoven and Crockett, the idea of combining them flows logically from their having been individually taught in the prior art.

Claim 8 is included herein since the function of the polysuccinimide has increasing slow-release action reasonably logically follows accepted equilibrium processes wherein as the solutes in the system increase, the further solubility decreases. Furthermore, as the polysuccinimide component decreases and is depleted, the release thereof would be expected to become increasingly slower.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al, US 5,266,237, as applied to claims 1-7 and 26 above, and further in view of Wood

et al, 5,552,518. Freeman et al discloses the conditioning agents as set forth in the above rejections. Said characterization of the reference is herein incorporated by reference.

Wood et al (column 3, lines 19 et seq) teaches fatty acids in combination with hydrolyzed reaction products of maleic anhydride and ammonia or amines with fatty acids to modify the hydrophobic/hydrophilic ratio. Please note (examples) the reaction products are increasingly more insoluble in water.

To the extent Freeman et al differs in the slow-release action of the polysuccinimide is increasingly slow, it would have been obvious to one of ordinary skill in the art at the time of applicants' invention to employ the conventional modifications of the polysuccinimides for the particular end use to allow for prolonged release to mitigate depositions as taught in the Freeman et al reference.

Response to Arguments

12. Applicant's arguments with respect to claims 1-8 and 26 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM